

## PATENT ABSTRACTS OF JAPAN

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## (54) FATIGUE IMPROVER

## (57)Abstract:

PURPOSE: To obtain a fatigue improver for promoting lactic acid metabolism in a body, having smoothing action on energy production, comprising biotin, carnitin and pantothenic acid as active ingredients.

CONSTITUTION: This fatigue improver contains carnitin and pantothenic acid besides biotin as active ingredients. Biotin promotes lactic acid metabolism in a body by activating pyruvate carboxylase and smoothes energy production by supplying oxalacetic acid. Carnitin and pantothenic acid which are factors for supplying and adjusting acetyl COA to be reacted with the oxalacetic acid and to cause a starting reaction of TCA circuit are added to the fatigue improver to show an effective fatigue recovering action. An effective dose of biotin is 50-5,000 $\mu$ g per adult daily, that of carnitin is 0.25-1,000mg and that of pantothenic acid is 0.25-750mg. The fatigue improver is useful for preventing and treating physical and mental fatigue.

## LEGAL STATUS

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